

US EPA ARCHIVE DOCUMENT



New England Association of Environmental Biologists

30th Annual Meeting

**Bethel Inn
Bethel, Maine
March 29 – 31, 2006**



Hosted by

Maine Department of Environmental Protection

PROGRAM SUMMARY

Please note that sessions and presentations will start and end on time so that participants can move between sessions. Please show your respect to speakers by being on time.

All sessions, unless otherwise noted, are in the Conference Center.

WEDNESDAY

MARCH 29

11:00 AM – 1:00 PM

NEAEB Registration

NOON

Lunch – on your own (see list of restaurants in your NEAEB packet)

1:00 PM – 2:30 PM

Session A: Tiered Aquatic Life Uses

Moderator: Susan Davies

Susan Davies
Chris Yoder
Region I State and EPA
Biologists

Introduction to Tiered Aquatic Life Use (TALU) and Region 1 activities

Critical Elements Evaluation: TALU Region 1 pilot

Panel: Regional Needs and Context for TALU

**Session B: NEAEB and NEBAWWG: Recognizing the Connection:
Monitoring Wetlands for Watershed Health**

Moderator: Beth Card

Jan Stevenson
Martha Nielsen
Charles Costello

Stressor diagnosis and ID based on species sensitivities and tolerances

HGM classification for Acadia National Park using GIS variables

GIS & Remote Sensing: Detecting wetland change and need for enforcement

Session C: Education & Outreach

Moderator: Barb Welch

Angie Reed

Native Science Education: Watersheds As Life Sources Who Connect
Culture And Place

David Kramar

PEARL: Data acquisition and information summaries for environmental
education and outreach in Maine

Karen Bates

It's all in the outputs: Choosing the right partners for successful urban
NPS pollution reduction in an urban setting

2:30 PM – 3:00 PM

BREAK



3:00 PM – 4:30 PM

Session A: Assessment Methods

Moderator: Leon Tsomides

E. Pizzuto, Beauchene,
Hoffman, Wahle

Summary of Results for CT's first Statewide Probabilistic Wadeable Stream Monitoring Project; water chemistry, benthos, fish and periphyton

M. Beauchene, E.Pizzuto

Development of a successful system for managing water quality and biological monitoring data using MS ACCESS; CT's experience

Jen Stamp

A workable approach for state comprehensive assessments

Session B: NEAEB and NEBAWWG: Integrating Wetlands and Surface Water Monitoring Programs

Moderator: Amanda Davis

Matt Schweisberg

Wetlands Monitoring and Assessment Strategy

Tom Danielson

Maine's integration process

Chris Faulkner

Roundtable Discussion: Exploring the challenges and opportunities with integration of monitoring programs

Session C: Toxicity

Moderator: Barry Mower

Rosemary Gatter-Evarts

Chronic toxicity in Connecticut Rivers

Mark Whiting, William Otto

pH in downeast rivers: Effects on salmon

Angela Shambaugh

Increasing chloride in Vermont surface waters: The tip of the iceberg?

4:30 PM – 5:30 PM

NEAEB Business Meeting (Library in the main building)

5:30 PM – 8:00 PM

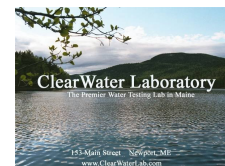
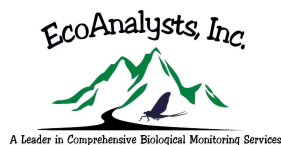
Dinner on your own (see list of restaurants in your NEAEB packet)

8:00 PM

Reception, Cash bar and Entertainment (South Dining Room)

Guess with the NEAEB Legends or So you think you know NEAEB!

Join us for a lively game show where everyone participates in teams to match wits with the NEAEB elders. Categories include NEAEB history, What is that?, Northeast trivia, and Things you should know if you had been paying attention in school.



THURSDAY

MARCH 30

Please note that sessions and presentations will start and end on time so that participants can move between sessions. Please show your respect to speakers by being on time.

Posters will be in the Gibson Room in the main building.

They will be available all day for viewing as well as a special session from 4:30 – 6:00 PM.

6:30 AM – 9:00 AM

BREAKFAST

8:00 AM – 9:30 AM

Session A: Mercury

Moderator: Barry Mower

Neil Kamman

Mercury mass balance in Lake Champlain

Barry Mower, Dave Evers

Mercury, Mercury everywhere! What's a critter to eat? Development of a

Mercury Wildlife Criterion for Maine

Barry Mower

Regional TMDL

Session B: Long Term Changes

Moderator: Barb Welch

Heather Burgess

Paleolimnology as a tool for interpreting ecosystem changes in freshwater lakes

Glenn Hodgkins

Climate-related seasonal changes on New England lakes and rivers during the last two centuries

Phil Snyder

Long-Term Monitoring Program for evaluating changes in water quality in Adirondack Lakes, 1992-2004

Session C: Assessment Methods

Moderator: Dave Halliwell

M. Beauchene

Use of Fish Community Data from CT for ALUS Assessment; IBI and BPJ

David Neils

Cold water fish community presence in New Hampshire using a logistic regression predictive model

Chris Yoder

Continued Development of a fish assemblage assessment method for non-wadeable large rivers in Maine and New England: 2002-2005

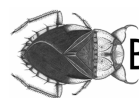
9:30 AM – 10:00 AM

BREAK

10:00 AM – 12:15 PM

PLENARY: Values in Environmental Decision-Making

This thought-provoking session will engage the group with a broad discussion of how decisions are made, the values that go into (or should go into) decision-making, and how various kinds of information influence environmental decisions. We hope to build a better understanding of environmental decision-making in a more systemic way and stimulate thinking about how your ecological/biological values fit into the overall decision process. Speakers include Martha Kirkpatrick, Harvard Divinity School; Barry Dana, Penobscot Indian Nation; and Wendy Porter, Interface Inc.



BIODRAWIVERSITY
www.biodrawiversity.com

12:15 PM

LUNCH (Main Dining Room)

1:30 PM – 3:00 PM

Session A: TMDLs; Impervious Cover

Moderator: Mary Ellen Dennis

Ken Hickey, Kennedy, SanAntonio	Use of the Impervious Cover Model for developing TMDLs for stormwater impaired streams
Chris Bellucci	Percent Impervious Cover as a surrogate target for TMDL analyses in Connecticut
Melissa Evers	Maine's % Impervious Cover TMDL's & stressor connections

Session B: Lakes

Moderator: Linda Bacon

Neil Kamman	Lake Biocriteria
Bjorn Lake	Factors contributing to the internal loading of phosphorus from anoxic sediments in six Maine lakes
Camille Rivard-Sirois	The Diagnosis of the State of our lakes

Session C: Biodiversity

Moderator: Leon Tsomides

Chandler, Whitmore, Burian, Burger	Biodiversity and seasonality of the stream mayflies of New Hampshire
Ethan Nedeau	Freshwater mussels in the Connecticut River
Peter Vaux, Arlene Olivero	Maine's freshwater biodiversity: spatial and temporal patterns

Workshop: BioSim2; Dr. Carlos Pinkham (Library in the main building) 1:00 – 4:30

Pinkham-Pearson index of similarity has been evaluated by EPA as one of the more powerful tools for comparing community structure in its rapid bioassessment protocol. However, its use has been limited because the program that ran it, BioSim1, was only available in DOS format. Recently, a user-friendly version of BioSim2 was written in a Java format that can run on Windows, Mac OS, Linux, or anything with Java v1.4 or higher. The user manual for this version has now been published by EPA.

This course will use real world data with real-world problems to show how the Pinkham-Pearson index works, how it differs from other indexes used for comparing community structure, the various ways data can be examined using BioSim2, and how BioSim2 can give insights into data interpretation. Copies of the beta version of BioSim2, the EPA user's manual, and other resources will be available at no cost. If you have data you'd like to run in BioSim2, whether it be taxa, site, date or abiotic data or any combination thereof, bring it in an xls, csv, or other common spread sheet format.

3:00 PM - 3:30 PM

BREAK



TETRA TECH, INC.



METCALF & EDDY

AECOM

Session A: TMDL Innovations

Moderator: Melissa Evers

Doug Burnham, Tim Clear
Steve Hinchman

Developing a hydrologic TMDL for a stormwater-impaired stream in Vermont
Can you call it a TMDL if there is no T - M - D or L? (Permit writers in the Storm)

Session B: Sustainable Flows

Moderator: Mark Whiting

Lee Dunbar
Ralph Abele

In-stream flow regulation in CT
The role of techniques developed in the Quinebaug River Ecohydrology
Studies in water allocation and biological assessment

Session C: Biodiversity, fishless

Moderator: Tom Danielson

Katie DeGoosh

There's something fishy about fly larvae: Chaoborus assemblages as an indicator of fishless ponds

Schilling, DeGoosh, Loftin,
Huryn, Butler, deMaynadier

Assessing the geographic distribution and invertebrate biodiversity of naturally fishless lakes in Maine.

Workshop: BioSim2 continued

4:30 PM – 6:00 PM

Poster Session, Gibson Room (main building)

Suzanne Flint	Assessing Total Plant Biomass on the Major Impoundments of the Assabet River in Eastern Massachusetts
Larry Abele	Identification of the Aquatic Oligochaete Tubifex tubifex, alternate host of a metazoan parasite that causes whirling disease in trout and salmon.
Susan Capone	Assessment of Acidic Deposition Effects on Stream Chemistry in the Western Adirondack Region of New York
Glenn Hodgkins	Climate-related seasonal changes on New England lakes and rivers during the last two centuries.
Beth Connors	BioImp- Biomonitoring Internet Mapping Project - Live Demonstration!
Doug Burnham, Tim Clear	Developing a Hydrologic TMDL for a Stormwater-Impaired Stream in Vermont
Chris Duerring	Enhancing the Bacterial Source-Tracking Toolbox: A Collaborative Approach
Ronald Butler, Phillip deMaynadier	The Significance of Littoral and Shoreline Habitat Integrity to the Conservation of Lacustrine Damselflies (Odonata)
David Halliwell, Whittier, Paulsen	Regional Cyprinid Distributions in Northeast Lakes: Evidence of Loss of Minnow Biodiversity
Mike Beauchene	Five Years of Volunteer Macroinvertebrate Monitoring and the 305b Report
Mike Beauchene	HOBOS: A Great Way to Get Cheap Data
Kathie Dello	Use of the National Hydrography Dataset to delineate State water quality assessment units for 305(b) reporting

6:00 PM – 7:30 PM Banquet (Main Dining Room)
7:30 PM – 8:15 PM Dinner Speaker: George Jacobson “Climate change and its implications for northeastern ecosystems”

Join us to hear the latest information about climate history and associated biological responses, and the questions that relate to current management and monitoring. George Jacobson is Professor of Quaternary Biology in the Department of Biological Sciences, (Former Director) Climate Change Institute Bryand Global Sciences Center, University of Maine, Orono.

8:30 PM – 11:30 PM Entertainment: Return of the Electric Eels, Millbrook Tavern (main building)

FRIDAY

MARCH 31

Please note that sessions and presentations will start and end on time so that participants can move between sessions. Please show your respect to speakers by being on time.

6:30 AM – 9:00 AM BREAKFAST

8:30 AM – 10:00 AM Session A: Assessment
Moderator: Melissa Evers

R. Kelley, Denoncourt, Crowley	Watershed monitoring for ski and snowboard terrain expansion
Ben Jessup, Bryson, Poretti	Non-conforming metrics: When biological responses are opposite the expected
Shane Bradt	The use of geospatial technologies to monitor surface waters

Session B: Rivers
Moderator: Mark Whiting

Matt Scott	Smallmouth bass (an invasive species) and potential impact to Atlantic salmon recovery in the Pleasant River watershed
Athey, Henderson, Doyle-Breen, Boison	Connecticut River Habitat Restoration: a significant population of rare mussel species?
Henderson, Shreve-Gibb, Pearson, Billips	American shad migration in the Westfield River, MA: Is wastewater an issue?

Session C: Effects of Shorefront Development
Moderator: Judy Potvin

Kellie Merrell, Mathews, Warren	Measuring effects of lakeshore development: A littoral habitat study approach (part 1)
Leslie Matthews, Merrill, Warren	Measuring effects of lakeshore development: Does lakeshore development affect littoral habitat? (part 2)
Dave Halliwell	Minnow species diversity in northern Maine woodland lakes - potential effects of proposed large-scale human development

Workshop: Summary of State Comprehensive Monitoring Plans, Diane Switzer (8:30 – noon)
In the Library (main building)

10:00 AM – 10:30

BREAK

10:30AM – 12:00 PM

Session A: Nutrients

Moderator: Mary Ellen Dennis

Tom Danielson

Establishing ecologically meaningful nutrient criteria for Maine rivers and streams

Dan Kusnierz

From greens to blue-greens: What might happen next in the Penobscot River?

Session B: Dam Removal

Moderator: Dave Courtemanch

Laura Rose Day

Penobscot River Restoration Project – Why Dam Removal?

Julia Kay Christensen
Eichman

Impacts of a small dam removal on diatom assemblages in the Neversink River, Delaware River Drainage, New York

Session C: Education & Outreach

Moderator: Barb Welch

Christine Smith

LakeSmart as an example of targeting audience & program evaluation

Barb Welch

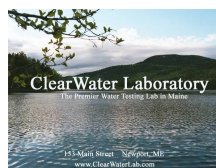
The story behind the Rubber Duck Stormwater Campaign

Workshop: Summary of State Comprehensive Monitoring Plans, Diane Switzer continued

12:00 PM

ADJOURN

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